

n August, the New Orleans Parish School Board received a stunning report from school administrators: With only a week before students returned to school, the district was short about 150 certified teachers.

In Chicago, a month after classes began this year, the public schools reported more than 1,200 unfilled teacher positions.

Forecasters have considered such vacancies warning signs of a looming national teacher shortage, which by some projections could reach nearly 2.5 million in the next decade. But educators have begun to question these estimates and, in the process, to shift their concerns from teacher supply to teacher quality and retention.

"A lot of our projections don't make any sense," says Arthur Levine, president of Columbia University's Teachers College. "In the long run you look down the road and say, 'If this happens, if that happens.' It's a guess. Is it a sure thing? No."

Teacher shortages vary from place to place and subject to subject, Levine says, with the greatest gaps in urban and rural districts and in science, math, and special education. As a result, he says, shortages "pose different kinds of difficulties for different areas. Some are quantity difficulties. Some are quantity and quality difficulties, and some are just quality difficulties."

Rising enrollments and surging teacher retirements will surely cause shortages in some states and school districts, particularly those with rapidly growing populations. But inter-

views with a wide range of educators and researchers reveal that the larger question is how to create the conditions—in school districts and individual schools-that will draw talented people to teaching, keep them from leaving, and ensure their professional growth and development.

Defining 'highly qualified'

With research confirming a direct link between teacher competency and student achievement, teacher quality is moving to the top of the education agenda. Just as the public is insisting on higher standards and performance for students, it is expecting no less from the nation's teachers. And that means school districts need to do more than simply fill vacancies. The new challenge is to craft long-term strategies for finding and keeping high-performing teachers.

But improving teacher quality is an uphill battle. A barrage of independent commission reports, proposing a host of measures for educating, recruiting, and retaining competent teachers, has yet to generate a consensus for change. Meanwhile, the federal No Child Left Behind Act directs the states to certify, by June 30, 2006, that all teachers in core subjects are "highly qualified"—despite the widespread complaint that NCLB provides neither clear direction nor enough funds to ensure compliance.

Parents and students claim to know a good teacher when they see one, but educators and policy makers still can't agree on what kind of training teachers should receive or how to define a "qualified" teacher. NCLB's definition of "highly qualified," for example, focuses almost entirely on a teacher's content knowledge, while downplaying the importance of studying child development and the art of teaching.

"There is the notion, almost Orwellian, that a highly qualified teacher is someone who has never studied teaching," says Levine. On the other hand, Kate Walsh, president of the National Council on Teacher Quality, asserts that "the evidence isn't there that pedagogical training makes a huge difference." Rather, she says, "districts need to pay more attention to the academic caliber of their teachers, because we know from evidence that that does make a difference."

Adding to the confusion, NCLB allows each state to devise its own quality standards for veteran teachers. But according to *Searching the Attic*, a December 2004 study by Walsh's group, these standards are often irrelevant, riddled with loopholes, or set so low as to be meaningless.

A perverse consequence of NCLB, according to professor James E. Ryan of the University of Virginia Law School, is that it discourages good teachers from taking jobs in challenging classrooms. Writing in the June 2004 New York University Law Review, Ryan argues that the act's sanctions against schools with low student test scores—even when the schools show strong gains in student learning—will make teaching disadvantaged students less attractive.

Board-union teamwork

While turning the spotlight on teacher competency, federal policy has failed to recognize that the day-to-day work of improving teacher quality takes place in school districts and schools. Ultimately, improving teacher effectiveness will depend not on federal policy but on the successful collaboration of local school boards and teacher organizations.

An outstanding example is the alliance of the school board and teachers association in the racially diverse Elk Grove Unified School District, the eighth largest in California. Elk Grove board president Priscilla S. Cox attributes the district's success in hiring and motivating teachers to strong leadership, well-maintained schools, small classes, a support program for beginning teachers, and competitive salaries and benefits—including bonuses for teachers in the high-need areas of special education, math, and science. The district annually receives 10,000 applications for 200 to 300 teaching positions. Currently fewer than 1 percent of the 2,041 teachers in Elk Grove are working without credentials, compared with a state average of 12 percent.

"Ours is not the typical adversarial situation," Cox says. The school board conducts interest-based bargaining workshops with union members a few days a month to help develop good relationships. In addition, the teachers union invites board members to meet quarterly for dinner to discuss issues of mutual concern. "We are all there for the same goal and for the same students," Cox says. Elk Grove also boasts unusual superintendent and board stability. The district has had only five superintendents in 50 years, and Cox has served on the board for 10 years.

Maggie Ellis, president of the Elk Grove Education Association, believes communication is the key. "Our association leaders and school board members have invested in open, honest dialogue on a regular basis," says Ellis, a fifth-grade teacher at Mary Tsukamoto Elementary School. All of the association's executive board officers and staff are currently classroom teachers, she adds, which "gives us more credibility when we speak with district leadership because we are in the daily grind."

Board and union teamwork is also paying off in Denver, where the school board and the Denver Classroom Teachers Association reached agreement on the contentious issue of pay for performance. In March 2004 the parties ratified a pact, the first of its kind for a big-city district, that would make Denver's teachers eligible for higher pay based on performance rather than years on the job and graduate course study. Teachers who improve student learning, receive good evaluations, advance their skills, or accept assignments in high-poverty schools or in subjects with teacher shortages would receive bonuses and could earn up to \$90,000 annually earlier in their careers—well above the current maximum of \$65,000 for Denver teachers with a Ph.D. and 25 years of service. A plan to increase property taxes to finance performance-based pay for Denver teachers is subject to approval by the voters in November. Superintendent Jerry Wartgow believes the voters will support it.

As an inducement for attracting and retaining qualified teachers, pay does matter. An August 2004 report by the non-partisan Economic Policy Institute found that the pay gap between teachers and other comparably skilled professionals has widened in the past decade, making it easier to lure professionals to jobs that increasingly pay more. Teachers' weekly salaries, adjusted for inflation, rose only 0.8 percent since 1996, the study showed, compared with 12 percent for other college graduates.

In a groundbreaking move on pay, Sandra Feldman, who last year stepped down as president of the American Federation of Teachers, proposed giving higher salaries to teachers who significantly raise student achievement, individually or as a team. Writing in the March 2004 issue of the AFT's *American Teacher* magazine, she urged school systems to find ways "to reward different roles, responsibilities, knowledge, skills, and, yes, results," and to reward them earlier. "Young people don't want to wait 20 years when they could enter another profession and make a comparable salary much sooner, and earn even more as they go on," Feldman wrote. However, the National Education Association, the nation's largest teachers union, opposes giving higher pay for performance.

The corollary to rewarding outstanding performance is penalizing poor performance. "Unions refuse to get rid of bad teachers—they keep them forever," says Teachers College president Levine. "This ensures that the majority of our best and brightest won't even consider careers in teaching and encourages the best to leave."

Union leaders claim they favor removing poorly performing teachers, as long as it is done fairly. "Nobody likes to do a

bad job," says Joan Baratz-Snowden, director of the AFT's educational issues department. "Some of the teachers just have no idea either how to do a better job or how to stop doing this job. Part of it is counseling them out and showing them how they can use their skills to do other things, and part of it is actually giving them the supports they need."

Raising the bar for preparation

Teacher quality is grounded in preparation, but there is no agreement on what constitutes an effective teacher education program. Should it be undergraduate or graduate? A four-year or a five-year program? In an education department or an alternative post-graduate program?

At a time when some observers see alternative certification as the answer to teacher shortages, the Carnegie Corp. of New York is making a strong case for university-based teacher education. Carnegie has spearheaded Teachers for a New Era, a multimillion-dollar, five-year initiative in teacher education reform at 11 institutions of higher education.

A radical feature of the program, launched in 2001, is an agreement by the participating institutions to track their graduates on the job and measure whether the children in their classes show learning gains. "High-quality teaching is only made demonstrable by student learning growth," says Daniel Fallon, who chairs Carnegie's education division. Participating institutions must ensure collaboration between their arts and sciences faculties and their schools of education. They are also charged to include master teachers as faculty in colleges of education and to supervise a two-year induction program for beginning teachers. At the project's conclusion, Carnegie expects the selected institutions to become models that can be widely replicated.

Moving to strengthen its education schools and end the granting of emergency licenses, New York state has gained national attention for a set of deep-seated teacher education reforms. Early last year, the state announced that education schools with less than an 80 percent pass rate on state certification exams had to strengthen their programs or shut down. Teacher candidates must now pass three examinations, including a content specialty test, and new teachers must qualify for a professional certificate within five years. During that time, they must complete three years of satisfactory teaching, with a mentoring program in the first year.

The 2004 reforms also require new teachers to complete a master's program focused on the subject they teach within three years after entering the classroom. Critics argued for a longer period, so as not to discourage talented college graduates or people in mid-career from entering the profession. In January, the state extended the time for obtaining a master's degree to five years.

In New York state, the bar has been raised. But raising standards for teacher preparation in the face of shortages of qualified teachers may not prevent states from adjusting certification requirements or issuing temporary licenses in order to hire desirable candidates in districts or subjects where the need is critical. In fact, 43 states, including New York, reported having an alternate route for certifying teachers, according to a 2004 U.S. Department of Education study.

What new teachers need

Even with the best preservice education, though, most new teachers enter the classroom unprepared for the demanding task of helping young people learn. What novice teachers desire most are conditions that promote collegiality, continuous learning, and support from the principal, according to Susan Moore Johnson, director of the Project on the Next Generation of Teachers at Harvard University's Graduate School of Education. The project's researchers studied a random sample of 486 first- and second-year teachers in California, Florida, Massachusetts, and Michigan and found that new teachers have limited opportunity for interaction with experienced colleagues, receive little guidance, and yet are expected to shoulder the same teaching load and perform as well as veteran teachers.

In Finders and Keepers: Helping New Teachers Survive and Thrive in Our Schools, a report by Johnson and her project team, the authors stress the importance of a comprehensive school-based induction program for new teachers as a strategy for promoting interchange with colleagues and a shared commitment to schoolwide learning. Successful induction programs, according to the report, are not add-ons but are integrated into the professional practice of the school. They are conducted by a cadre of experienced classroom teachers, not just one-on-one mentors, and they depend on additional resources, both money and time-including release time for experienced teachers and staff developers and stipends to new teachers for additional training.

Strong principals are essential, according to Johnson. "Someone has to understand the needs of new teachers, the complexity of the school, the difficulty of teaching, and also recognize how to hand off this responsibility to more experienced teachers," she says.

Much depends on when and how the new teacher is hired. In a random survey of teachers in their four-state study, Johnson and her colleagues found that almost two-thirds of new teachers are hired less than a month before the start of their teaching duties; among them, approximately one-third are hired after the school year has begun. The study revealed that most hiring practices give new teachers little opportunity to interact with prospective colleagues and students and to learn about the culture of the school.

To avoid this bind, the Chicago Public Schools is issuing preliminary enrollment projections in February and final enrollments at the end of June. What's more, the district is guaranteeing that principals will not lose any positions should actual enrollment be lower. "Nobody likes to tell a teacher on October 1 that his job is eliminated," said chief executive officer Arne Duncan in a statement this past fall. "Today, principals are hiring earlier, the pool of candidates is better, and ultimately the quality of teaching will be better as well."

Apart from hiring problems, Richard Ingersoll of the Uni-

versity of Pennsylvania points to the cost, both educational and financial, of high teacher turnover. About 40 percent of teachers leave the profession in the first five years, according to Ingersoll, mainly due to lack of support from administrators, poor student discipline, low pay, and lack of involvement in school decision making. The "revolving door" is especially prevalent in urban, rural, and low-income communities, which lose an average of more than 20 percent of their teachers annually, according to Ingersoll. "We're really not going to meet the No Child Left Behind standards for a high-quality teacher unless we deal with turnover," he says, while acknowledging that some turnover is necessary or even desirable. "You want some people to leave so you can get fresh blood in there."

Nor do most school districts assess the real financial costs of teacher turnover, Ingersoll claims. Using industry models, a 2000 study by the Texas Center for Educational Research concluded that the average cost to Texas education systems of teachers leaving the profession amounts to approximately 25 percent of each leaving teacher's salary and benefits. The estimated total cost of teacher turnover in Texas for the 2003-04 school year is \$478 million. And even this figure does not take full account of costs related to termination, recruitment and hiring, substitute salaries, learning-curve loss, and training.

As a barrier to recruiting, retaining, and motivating new teachers, seniority—the third rail that most schools boards and unions have refused to touch—is getting increasing scrutiny in labor agreements. Beyond formal seniority policies, schools often reward senior teachers with perks such as prized course assignments, larger classrooms, and time off for conferences. "Schools are fairly top-down places," observes Ingersoll. "Particular teachers have more power and more influence, and that provides a carrot for retention. But it's lousy for the incoming teacher, who gets assigned to the least attractive schools." Moreover, he says, beginners are more often assigned to teach courses out of their field.

In the Elk Grove Unified School District, where the school board and teachers union have achieved a high degree of harmony, seniority rarely comes into play. "I can't say I've experienced anyone consistently receiving the easiest or the most difficult classes on purpose—no matter what their level of experience is," says teachers association president Maggie Ellis.

A challenge for school boards

As school districts respond to demands for higher standards and achievement for their students, they will need to impose parallel demands on their teachers. The quest for high-performing teachers will challenge school boards to form new alliances with their teachers unions at a time of scarce resources and scanty research on what, in fact, makes a teacher successful.

The public thirst for greater student achievement continues unabated, and high-quality teachers are indispensable for reaching that goal. School boards, therefore, must regard the challenge of teacher quality as an opportunity for innovation, compromise, and change.

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FINDING—AND KEEPING—THE BEST TEACHERS

- 1. Put teacher quality at the center of district policies. In hiring, set high standards for knowledge of both subject matter and teaching practices.
- 2. Build trust. Encourage regular communication and joint problem solving to develop trust among board members, administrators, and teachers. Involve teachers actively in district decision making, setting quality standards for schools, and training new teachers.
- 3. Consider pay for performance. Establish a committee of administrators and teachers to explore ways of rewarding teachers above the ordinary pay scale for improving student learning, accepting tough assignments, and serving in lowperforming schools.
- 4. Make job offers in a timely manner. Publicize vacancies, screen candidates, and interview applicants early. Involve teachers, as well as principals, in the hiring process. Consider ways to help new teachers complete certification requirements.
- 5. Support new teachers. Develop a high-quality induction or mentoring program, and establish a source of reliable,

- long-term funding for the program. Consider new teachers' needs when making class assignments, and introduce them to the school's culture. Involve the most talented and experienced teachers.
- 6. Identify weak teachers. Use regular performance assessments to find teachers who need help. Provide support and assistance when warranted, but if necessary, counsel them out of the profession.
- 7. Review seniority practices. This goes for formal and informal practices alike. Encourage a collegial atmosphere that makes possible a rotation of tough assignments. Make sure the new teachers don't always get the least desirable programs and classrooms.
- 8. Keep schools safe and sound. Maintain a high degree of school safety, student discipline, and building repair. Monitor conditions regularly and respond promptly to teachers' concerns about them.
- 9. Achieve and preserve small class size. Recognize that research confirms the importance of small classes to teacher effectiveness and student learning.—N.H and S.H.